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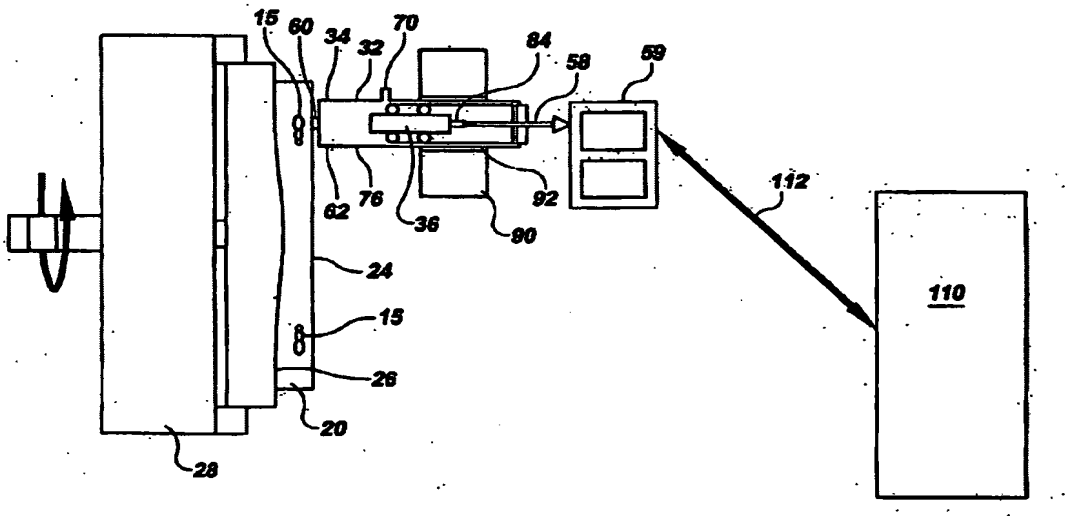
(54) Title: SYSTEMS AND METHODS FOR NON-CONTACT MEASURING SPUTTERING TARGET THICKNESS ULTRASONICS



(57) Abstract: A method and apparatus for ultrasonically measuring the thickness of sputter targets of varying shapes. An immersion bubble (32) and transducer (36) provide pulses to a front surface (24) and a front surface/bonded surface (26) interface of a target. The pulses generate reflected echoes that are converted to electric signals. By measuring the difference in time that the electric signals occur the thickness of the target may be approximated to identify whether the thickness of the target is appropriate for use. The system includes a sputter track (15), specimen (20), chuck (28), nozzle (34), columns (60), opening (62), inlet (70), cable (58), gauge (59), turret (90), position (92), remote PC controller (110), electrical line (112), and rear part (84).

WO 2004/097401 A1